

NOTE.—The application for a Patent has become void.  
This print shows the Specification as it became open to public inspection.

N° 18,254



A.D. 1912

(Under International Convention.)

Date claimed under Patents and Designs Act, 1907,  
being date of first Foreign Application (in } 10th Aug., 1911  
Belgium),

Date of Application (in the United Kingdom), 8th Aug., 1912

At the expiration of twelve months from the date of the first Foreign Application, the provision of Section 91 (3) (a) of the Patents and Designs Act, 1907, as to inspection of Specification, became operative

Complete Specification not accepted

#### COMPLETE SPECIFICATION.

#### Improvements in Rotary Pumps and Motors.

I, JOSEPH BAUDOT, of No. 62, rue d'Anvers, Tourcoing (Nord), France, Civil Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

5 This invention has for its object to provide an improved rotary pump also capable of use as a steam or hydraulic motor. The characteristic feature of this invention consists essentially in the peculiar operation of an adjustable abutment sliding in a slot formed in a driving cylinder operated in such a manner as to rotate eccentrically in the interior of a cylinder with which it makes contact and a joint along one of its generating lines.

One construction of this arrangement is illustrated by way of example in the accompanying drawings in which:—

Fig. 1 is a vertical section taken through the admission and exhaust orifices;

Fig. 2 is a vertical section taken at right angles to the first section, on the 15 line A—B of Fig. 1.

The construction shown comprises a cylindrical pump body 1 in which there rotates with slight friction an eccentric cylinder 2 through the centre of which there extends a movable abutment 3 equal in length to the diameter of the pump body 1.

20 In order to enable the abutment 3 to slide more easily in the cylinder 2, the latter is provided with two opposed rollers 4, 4 near which are arranged packings 5, 5 designed to prevent any fluid from passing through at the wrong times.

The pump body 1 is completed by two pipe connections 6 and 7 one of which 25 serves for the admission and the other for the exhaust of the fluid. The

[Price 8d.]



BEST AVAILABLE COPY

*Baudot's Improvements in Rotary Pumps and Motors.*

cylinder 2 is mounted on a shaft 8 extending through stuffing boxes; one end of this shaft is provided with a pulley 9.

On rotating the cylinder 2 in the direction of the arrow  $\alpha$  (Fig. 1) the abutment 3 being in constant contact with the inside surface of the pump body 1, draws liquid or air in at 6 and forces it out through 7 owing to every other passage being shut off by the friction at  $\gamma$  of the cylinder 2 at the interior of the said pump body. 5

The resistance to the sliding movement of the abutment 3 is reduced almost to nothing owing to the rollers 4, 4. Consequently this construction acting as a pump will have an efficiency higher than that of known rotary pumps. 10

The same construction can be run as a motor by taking care to arrange the rollers and the packings at 10, 10. In such a case the steam is admitted at 6 and since this steam is unable to escape at  $\gamma$  between the body 1 and the cylinder 2, it pushes the end  $\alpha$  of the abutment 3 towards 7. Meanwhile the end  $\alpha'$  of the said abutment is subjected in its turn to the action of the steam and so on. The abutment 3 carries the cylinder 2 and its shaft 8 around with it. 15

This construction provides a rotary motor having no dead centre with a minimum loss of power and which can be easily worked with expansion.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:— 20

1. A rotary pump with abutment, wherein the abutment slides in a slot formed in a driving cylinder which latter is arranged in such a manner that its friction along one part of the wall of the pump body prevents all communication between the suction orifice and the delivery orifice, of the pump body. 25

2. A rotary pump as claimed in Claim 1, worked as a rotary motor.

3. The improved rotary pump or motor constructed and operating substantially as hereinbefore described and also as illustrated in and by the accompanying drawings. 30

Dated this 6th day of August, 1912.

MARKS & CLERK,  
57 & 58, Lincoln's Inn Fields, London, W.C.,  
13, Temple Street, Birmingham, and  
25, Market Street, Manchester,  
Agents. 35

Rodhill: Printed for His Majesty's Stationery Office, by Love & Malcolmson, Ltd.—1912.

BEST AVAILABLE COPY

BEST AVAILABLE COPY

A.D. 1912. AUG. 8. N° 18,254.  
BAUDOT'S COMPLETE SPECIFICATION

( 1 SHEET )

[This Drawing is a reproduction of the Original on a reduced scale.]

FIG.1.

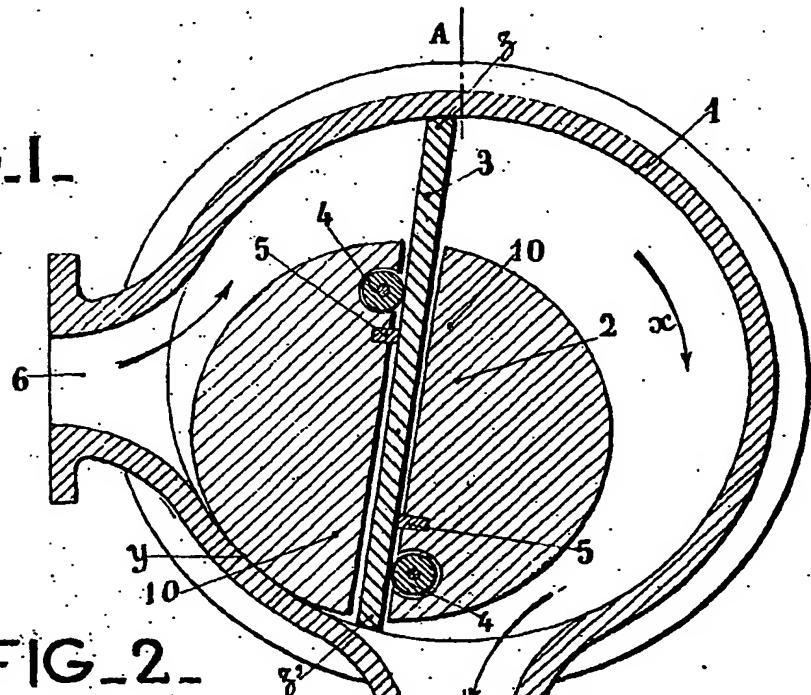
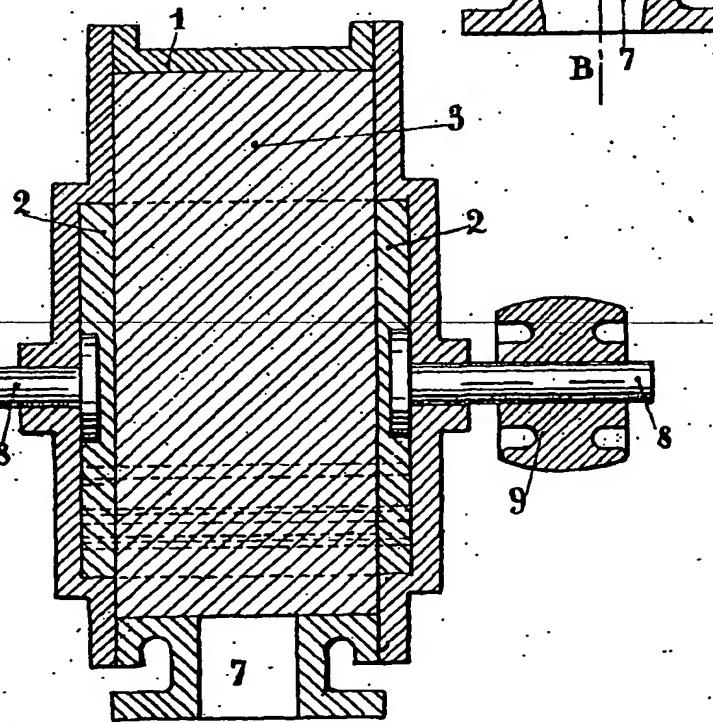


FIG. 2.



Melby & Sons, Photo-Litho.

BEST AVAILABLE COPY